

# Attempt to Irrigate Duchesne's Blue Bench Ends in Failure

by Craig W. Fuller  
Utah Historical Society

## Jesse Knight and The Knight Canal

Within hours of the arrival of the first company of Mormon pioneers to the Great Salt Lake Valley, men set about damming City Creek and flooding the land in preparation for plowing and planting crops. Although the Mormon pioneers were not the first to use irrigation west of the 100th meridian (the line where rainfall is less than 20 inches per year), they are certainly recognized for being the first Americans in the arid west to develop a successful, practical philosophy and use for this scarce resource of water. For the next half century Mormon irrigators developed a body of irrigation rules, laws, customs, codes and institutions which were, in part, adopted by other communities in the west.

Mormon farmers were not always successful in their efforts to turn water from small streams or raging rivers onto their lands. Sometimes community disputes and conflicting self-interests of community leaders and farmers resulted in the abandoning of farms, irrigation projects or entire communities. Often the failure was because of poor geographical location of the canal or community. Meandering rivers and streams, steep and rocky side hills, deep and dry gulches and other geographical features sometimes frustrated the Mormons' efforts to make the "Desert Blossom Like the Rose."

### Heroic Failure

One heroic effort that failed was the Knight Ditch or Canal, first called the Blue Bench Irrigation District Number One Canal. The Knight Canal is located northwest of Duchesne between the communities of Utahn and Duchesne in Duchesne County, Utah.

Duchesne County and the Uintah Basin were settled rather late in Utah history. In 1861, a major portion of the Uintah Basin was set aside by President Abraham Lincoln as an Indian Reservation for the Ute Indians living in the Great Basin and later for several bands of Utes from western Colorado. In August of 1905,



All that remains of this heroic but unsuccessful pioneering effort are several miles of rapidly deteriorating wooden flumes and syphons, and a few visible cuts of the old Blue Bench or Knight Canal above the community of Utahn.

(Photo courtesy of Dr. A. Kent Powell)

as part of the federal government's National Indian Policy to intermingle Indians with white farmers, the Uintah and Ouray Indian Reservation was thrown open to white homesteaders. This was the first and only time that an Oklahoma-type land rush occurred in Utah history.

Several decades earlier, the eastern portion of the Uintah Basin known as Ashley Valley was settled by Mormon farmers and ranchers and a few "gentiles." Unlike settlements in the Great Basin portion of Utah, they settled the area without direction or calling from church headquarters.

### Uintah Basin Land Rush

The August, 1905, Uintah Basin land rush resulted in hundreds of church members and non-members rushing by every means of conveyance to the Basin from Price, Provo, and Vernal to secure claims of 160 acres of former Indian land at a very low price. At the same time these homesteaders and a few, well-financed land development and irrigation companies made applications with the state engineer to secure the needed water to irrigate the land. Hundreds of second feet of water

were filed upon by individuals and irrigation companies.

Blue Bench is located in the heart of present-day Duchesne County, immediately north of Duchesne. The Bench is relatively flat with a moderate gradient running north to south. It contains approximately 15,000 acres of tillable soil, just perfect for several hundred families to locate and develop a prosperous agricultural community. The problem, however, was to divert water from the Duchesne River or its tributaries onto the Bench which is a hundred feet higher than the river.

During the summers of 1899 and 1900, five years before the Reservation was thrown open to homesteading, Cyrus C. Babb, working for the United States Geological Survey, was assigned by the Department of Interior and the United States Congress to review existing Indian canals on the Reservation and to make some preliminary surveys for future irrigation canal development. Babb hired A. L. Fellows, a civil engineer from Denver, Colorado, to assist him in the work.

One canal survey made by Fellows was aimed at diverting water from Rock Creek, a tributary



of the Duchesne River, to the Blue Bench. Several years later when Babb made his report to the House of Representatives, he recommended that his proposed canal be not considered for any future development as the "plan is not feasible, as the country is more rocky and broken the higher up stream the canal line is explored."

### Mormon Homesteaders Organize

Nine years later on July 15, 1909, the Mormon homesteaders on Blue Bench incorporated themselves under the irrigation laws of Utah as the Blue Bench Irrigation District Number One for the purpose of constructing a canal whereby water could be diverted from Rock Creek to Blue Bench, the plan A. L. Fellows had made earlier for the federal government.

Officials of the Irrigation District estimated that it would cost over \$100,000 to construct the main canal large enough to divert a hundred second feet of water. The head of the canal was sufficiently high enough upstream that a proper fall could be realized to reach Blue Bench.

But this would necessitate the construction of hundreds of feet of wooden flumes along the rocky ledges of the former ancient river banks of the Duchesne and across several wide and deep gullies and gulches.

In March, 1910, the Irrigation District hired Albert Halen to conduct a survey of the proposed canal and make an accurate estimate of the cost. In September, civil engineer Halen reported to the company officials that under his plans and specifications the proposed canal would cost \$89,000 to construct, well below the farmers' own estimates.

The problem was how to finance the construction of the canal. Dirt poor and barely able to raise enough crops without a constant adequate supply of water, the Blue Bench farmers turned to the selling of irrigation bonds. Blue Bench farmers used their farms and water rights as collateral for the sale of the canal bonds.

### Jesse Knight Buys Bonds

Large sums of money were not readily available in the Basin. They found a buyer of their bonds in the Knight Investment Company, own-



Jesse Knight

(Photo courtesy of Utah State Historical Society)

ed by Jesse Knight of Provo.

In the spring of 1913, the bids for the construction of the canal were opened. The lowest bidder was a construction company owned by the Knight Investment Company and W. O. Creer. The bid exceeded earlier estimates, and several changes in design and specifications further increased the cost. The Irrigation District awarded the contract to Knight's construction company.

Jesse Knight was born September 6, 1845, in Nauvoo to Newel and Lydia Goldthwaite Knight. Jesse came to Utah with the Edward Hunter Company in October, 1850. Beginning his business career at an early age as a teamster and freighter to the mining regions of western Montana, Knight, through hard work and frugality, eventually became involved in a wide range of economic activities including farming, mining and numerous business and commercial enterprises.

His investment company was active in a sugar company, an electric power generating plant, a railroad company, woolen mills, dry farming and the operation of a large grain elevator. Perhaps the biggest source of income came through his involvement in the Tintic Mining District, located about 35 miles southwest of Provo. There he was involved in the Humbug, the Iron Blossom and Beck mines.

### Founder of Knightsville

It was here that he established his own town of Knightsville, said to be

the only mining community free of saloons and women of the night in the West. In addition to the founding of Knightsville, Jesse Knight was the founder of the communities of Storrs in Carbon County and Raymond in Canada.

Knight's construction company successfully completed the canal and met the stipulated deadline. Water was flowing through the canal in the spring in time to provide water for the 1914 irrigation season. As agreed, Knight added 3,000 feet of additional wooden flumes to Halen's earlier plans and replaced the three high trestle flumes with three wooden syphons. All were large enough to carry 100 second feet of water from Rock Creek.

The overall length of the canal was 14.7 miles, 2.32 miles were side hill wooden flumes, .7 of a mile was a high trestle flume, and there was nearly a quarter of a mile of syphons.

The canal was declared an immediate success by Knight, Halen and the water users of Blue Bench. But the success of the canal and the hope of prosperity it would bring was short lived. Over the next several irrigation seasons Blue Bench farmers found it increasingly difficult to keep water in the wooden flumes. More money and time for repair work was needed, neither of which the Blue Bench farmers possessed. Increasingly, the farmers found it difficult to make the scheduled payments on their irrigation canal construction bonds to the Knight Investment Company of Provo.

By the end of World War I, Knight Investment Company had assumed ownership in the majority of land on the Blue Bench, through the forfeiture of bond payments. Like his predecessors, Knight believed the canal could deliver a sufficient and dependable flow of water to irrigate the land.

But eventually, the canal proved unsuccessful and a financial drain on the Knight Investment Company. Compounding this, in the early 1920s agricultural commodity prices dropped as a result of a nationwide agricultural depression. Within the decade Knight was caught in the deepest and longest depression to hit the country. As a result, Knight's dreams were dashed.